

CHAPTER 5

WATER QUALITY PARTNERSHIPS IN THE LITTLE HATCHIE RIVER WATERSHED

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5.1. BACKGROUND. The Watershed Approach relies on participation at the federal, state, local and nongovernmental levels to be successful. Two types of partnerships are critical to ensure success:

- Partnerships between agencies
- Partnerships between agencies and landowners

This chapter describes both types of partnerships in the Little Hatchie River Watershed. The information presented is provided by the agencies and organizations described.

5.2. FEDERAL PARTNERSHIPS.

5.2.A. Natural Resources Conservation Service. The Natural Resources Conservation Service (NRCS), an agency of the U.S. Department of Agriculture, provides technical assistance, information, and advice to citizens in their efforts to conserve soil, water, plant, animal, and air resources on private lands.

Performance Results System (PRS) is a Web-based database application providing USDA Natural Resources Conservation Service, conservation partners, and the public fast and easy access to accomplishments and progress toward strategies and performance. The PRS may be viewed at <http://prms.nrcs.usda.gov/prs>. From the opening menu, select "Reports" in the top tool bar. You will select the time period that you are interested in and the conservation treatment of interest on the page that comes up. Depending on the time period of interest, you will have various report options to choose from, such as location, reporting period and program involved in the reporting. You may be required to "refresh" the page in order to get the current report to come up.

The data can be used to determine broad distribution trends in service provided to customers by NRCS conservation partnerships. These data do not show sufficient detail to enable evaluation of site-specific conditions (e.g., privately-owned farms and ranches) and are intended to reflect general trends.

Conservation Practice	Feet	Acres	Number
Conservation Buffers	115,722	31	
Erosion Control		2,821	
Nutrient Management		6,290	
Pest Management		5,660	13
Grazing / Forages		646	
Tree and Shrub Practices		1,621	
Tillage and Cropping		3,065	
Wildlife Habitat Management		1,775	

Table 5-1. Landowner Conservation Practices in Partnership with NRCS in the Tennessee Portion of the Little Hatchie River Watershed. Data are from PRMS for October 1, 2001 through September 30, 2005 reporting period. More information is provided in Appendix V.

5.2.B. United States Geological Survey – Tennessee Water Science Center Programs.

The United States Geological Survey (USGS) provides relevant and objective scientific information and data for public use in evaluation of the quantity, quality, and use of the Nation's water resources. National USGS water resource assessments include the National Streamflow Information Program (<http://water.usgs.gov/nsip/>), National Atmospheric Deposition Network (<http://bqs.usgs.gov/acidrain/>), the National Stream Quality Accounting Network (<http://water.usgs.gov/nasqan/>), and the National Water-Quality Assessment Program (<http://water.usgs.gov/nawqa>). For a national overview of USGS water resources programs, please visit <http://water.usgs.gov>. Specific information on the Upper and Lower Tennessee River NAWQA study units can be found at <http://tn.water.usgs.gov/ten/tenn.html>.

In addition to National assessments, the USGS also conducts hydrologic investigations and data collection in cooperation with numerous Federal, State, and local agencies to address issues of National, regional, and local concern. Hydrologic investigations conducted by the USGS Tennessee Water Science Center address scientific questions pertaining to five general thematic topics:

1. Water Use and Availability,
2. Landforms and Ecology,
3. Watersheds and Land Use,
4. Occurrence, Fate, and Transport of Contaminants, and
5. Floods and Droughts.

In support of these investigations, the USGS Tennessee Water Science Center records streamflow continuously at more than 100 gaging stations, makes instantaneous measurements of streamflow at numerous other locations as needed or requested, monitors ground-water levels Statewide, and analyzes the physical, chemical, and biologic characteristics of surface and ground waters. In addition, the Water Science Center compiles annual water-use records for the State of Tennessee and collects a variety of data in support of National USGS baseline and other networks. More information pertaining to USGS activities in Tennessee can be accessed at <http://tn.water.usgs.gov>.

USGS Water Resources Information on the Internet. Real-time and historical streamflow, water-level, and water-quality data at sites operated by the USGS Tennessee Water Science Center can be accessed on-line at <http://waterdata.usgs.gov/tn/nwis/nwis>. Data can be retrieved by county, hydrologic unit code, or major river basin using drop-down menus on the web page. For specific information or questions about USGS streamflow data, contact Donna Flohr at (615) 837-4730 or dflohr@usgs.gov. Recent USGS Tennessee Water Science Center publications can be accessed by visiting <http://tn.water.usgs.gov/pubpg.html>. A searchable bibliographic database is also provided for locating other USGS reports and products addressing specific scientific topics.

5.2.C. U.S. Fish and Wildlife Service. The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. Sustaining our nation's fish and wildlife resources is a task that can be accomplished only through the combined efforts of governments, businesses, and private citizens. The U.S. Fish and Wildlife Service (Service) works with State and Federal agencies and Tribal governments, helps corporate and private landowners conserve habitat, and cooperates with other nations to halt illegal wildlife trade. The Service also administers a Federal Aid program that distributes funds annually to States for fish and wildlife restoration, boating access, hunter education, and related projects across America. The funds come from Federal excise taxes on fishing, hunting, and boating equipment.

Endangered Species Program

Through the Endangered Species Program, the Service consults with other federal agencies concerning their program activities and their effects on endangered and threatened species. Other Service activities under the Endangered Species Program include the listing of rare species under the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended: 16 U.S.C. 1531 et seq.) and the recovery of listed species. Once listed, a species is afforded the full range of protections available under the ESA, including prohibitions on killing, harming or otherwise taking a species. In some instances, species listing can be avoided by the development of Candidate Conservation Agreements, which may remove threats facing the candidate species, and funding efforts such as the Private Stewardship Grant Program. For a complete listing of endangered and threatened species in Tennessee, please visit the Service's website at <http://cookeville.fws.gov>.

Recovery is the process by which the decline of an endangered or threatened species is stopped and reversed, and threats to the species' survival are eliminated, so that long-term survival in nature can be ensured. The goal of the recovery process is to restore listed species to a point where they are secure and self-sustaining in the wild and can be removed from the endangered species list. Under the ESA, the Service and National Marine Fisheries Service were delegated the responsibility of carrying out the recovery program for all listed species.

In an effort to preclude the listing of a rare species, the Service engages in proactive conservation efforts for unlisted species. The program covers not only formal candidates but other rare species that are under threat. Early intervention preserves management options and minimizes the cost of recovery.

Partners for Fish and Wildlife Program

The U.S. Fish and Wildlife Service established the Partners for Fish and Wildlife Program to restore historic habitat types which benefit native fishes and wildlife. The program adheres to the concept that restoring or enhancing habitats such as wetlands or other unique habitat types will substantially benefit federal trust species on private lands by providing food and cover or other essential needs. Federal trust species include threatened and endangered species, as well as migratory birds (e.g. waterfowl, wading birds, shorebirds, neotropical migratory songbirds).

Participation is voluntary and various types of projects are available. Projects include livestock exclusion fencing, alternate water supply construction, streambank stabilization, restoration of native vegetation, wetland restoration/enhancement, riparian zone reforestation, and restoration of in-stream aquatic habitats.

HOW TO PARTICIPATE ...

- Interested landowners contact a Partners for Fish and Wildlife Biologist to discuss the proposed project and establish a site visit.
- A visit to the site is then used to determine which activities the landowner desires and how those activities will enhance habitat for trust resources. Technical advice on proposed activities is provided by the Service, as appropriate.
- Proposed cost estimates are discussed by the Service and landowner.
- A detailed proposal which describes the proposed activities is developed by the Service biologist and the landowner. Funds are competitive, therefore the proposal is submitted to the Service's Ecosystem team for ranking and then to the Regional Office for funding.
- After funding is approved, the landowner and the Service co-sign a Wildlife Extension Agreement (minimum 10-year duration).
- Project installation begins.
- When the project is completed, the Service reimburses the landowner after receipts and other documentation are submitted according to the Wildlife Extension Agreement.

For more information regarding the Endangered Species and Partners for Fish and Wildlife programs, please contact the Cookeville Ecological Services Field Office at 931/528-6481 or visit their website at <http://cookeville.fws.gov> .

5.2.D. Unites States Army Corps of Engineers-Memphis District. Memphis is one of six districts in the Mississippi Valley Division of the Corps of Engineers. The District's area of responsibility encompasses 25,000 square miles, portions of six states, 15 major drainage basins, and approximately 3 million citizens. Responsibilities also include maintaining a 355-mile, 9-feet deep, and 300-feet wide Mississippi River channel from Cairo, Illinois to the mouth of the White River in Arkansas.

The Memphis District serves the Nation by planning, designing, constructing and operating high quality and reasonably priced Civil Works water resource projects, primarily in the major mission areas of flood damage reduction, navigation, and environmental restoration and stewardship. The Corps' ongoing Civil Works responsibilities date back to the early 1800's when Congress authorized the removal of navigation hazards and obstacles in the early years of the nation's development. Over the years, succeeding Administrations and Congresses have expanded the Corps' missions to include most all water-related planning, development, and construction areas where a Federal interest is involved. Funds for Civil Works are provided through annual Energy and Water Appropriations Acts and through contributions from non-Federal entities for planning and /or construction of specific projects. All Civil Works projects involve a non-Federal, cost sharing sponsor.

Civil Works projects may also be funded under the Continuing Authorities Program (CAP). Congress has provided the Corps with standing authorities to study and build specific water resource projects for specific purposes and with specified spending limits. The CAP projects are implemented in a faster time frame, are limited in complexity, have Federal cost limits determined by the specific authority, are approved by the Division Commander, and do not need Congressional authorization.

To obtain additional information about the District, please refer to the home page at: <http://www.mvm.usace.army.mil> , or contact the following offices:

Public Affairs Office (General Information): (901) 544-3348

Regulatory Branch: (901) 544-3473

Planning, Programs, and (901) 544- 0658

Project Management Branch:

Continuing Authorities Program: (901) 544-0798

Environmental Analysis Branch: (901) 544-3857

5.3. STATE PARTNERSHIPS.

5.3.A. TDEC Division of Water Supply. The Source Water Protection Program, authorized by the 1996 Amendments to the Safe Drinking Water Act, outline a comprehensive plan to achieve maximum public health protection. According to the plan, it is essential that every community take these six steps:

- 1) Delineate the drinking water source protection area
- 2) Inventory known and potential sources of contamination within these areas
- 3) Determine the susceptibility of the water supply system to these contaminants
- 4) Notify and involve the public about threats identified in the contaminant source inventory and what they mean to their public water system
- 5) Implement management measures to prevent, reduce or eliminate threats
- 6) Develop contingency planning strategies to deal with water supply contamination or service interruption emergencies (including natural disaster or terrorist activities).

Source water protection has a simple objective: to prevent the pollution of the lakes, rivers, streams, and ground water (wells and springs) that serve as sources of drinking water before they become contaminated. This objective requires locating and addressing potential sources of contamination to these water supplies. There is a growing recognition that effective drinking water system management includes addressing the quality and protection of the water sources.

Source Water Protection has a significant link with the Watershed Management Program goals, objectives and management strategies. Watershed Management looks at the health of the watershed as a whole in areas of discharge permitting, monitoring and protection. That same protection is important to protecting drinking water as well. Communication and coordination with a multitude of agencies is the most critical factor in the success of both Watershed Management and Source Water Protection.

Watershed management plays a role in the protection of both ground water and surface water systems. Watershed Management is particularly important in areas with karst (limestone characterized by solution features such as caves and sinkholes as well as disappearing streams and spring), since the differentiation between ground water and surface water is sometimes nearly impossible. What is surface water can become ground water in the distance of a few feet and vice versa.

Source water protection is not a new concept, but an expansion of existing wellhead protection measures for public water systems relying on ground water to now include surface water. This approach became a national priority, backed by federal funding, when the Safe Drinking Water Act amendments (SDWA) of 1996 were enacted. Under this Act, every public drinking water system in the country is scheduled to receive an assessment of both the sources of potential contamination to its water source of the threat these sources may pose by the year 2003 (extensions were available until 2004). The assessments are intended to enhance the protection of drinking water supplies within existing programs at the federal, state and local levels. Source water assessments were mandated and funded by Congress. Source water protection will be left up to the individual states and local governments without additional authority from Congress for that progression.

Tennessee's Wellhead Protection Rules were revised as of October 29, 2005 to include requirements for similar protection for public water systems using surface water sources under the heading of Drinking Water Source Protection Rule (1200-5-1-.34) in addition to the previous requirements for wellhead protection for public water systems using ground water sources. The rule addresses surface or ground water withdrawals in the vicinity of public water sources as well as potential contaminant sources threatening public water sources to reflect the amended prohibitions in the 2002 Amendments to the Tennessee Safe Drinking Water Act, TCA 68-221-771. There are additional reporting requirements of potential contaminant source inventories and emergency response for the public water systems as well. The Division of Water Supply will be able to use the Drinking Water Source Protection Rule to work in complimentary fashion with the Division of Water Pollution Control and other Departmental agencies in activities to protect public water sources.

As a part of the Source Water Assessment Program, public water systems are evaluated for their susceptibility to contamination. These individual source water assessments with susceptibility analyses are available to the public at <http://www.state.tn.us/environment/dws> as well as other information regarding the Source Water Assessment Program and public water systems.

For further discussion on ground water issues in Tennessee, the reader is referred to the Ground Water Section of the 305(b) Water Quality Report at:

<http://www.state.tn.us/environment/water.htm>.

The intent of this report is to provide the public with an overall characterization of ground water quality and hydrogeology for Tennessee.

5.3.B. TDEC Division of Community Assistance. The Division of Community Assistance administers the state's Clean Water State Revolving Fund Program. Amendment of the Federal Clean Water Act in 1987 created the Clean Water State Revolving Fund (SRF) Program to provide low-interest loans to cities, counties, and utility districts for the planning, design, and construction of wastewater facilities. The U.S. Environmental Protection Agency awards annual capitalization grants to fund the program and the State of Tennessee provides a twenty-percent funding match. The Division of Community Assistance has awarded loans totaling over \$675 million since the creation of the SRF Program. SRF loan repayments are returned to the program and used to fund future SRF loans.

SRF loans are available for planning, design, and construction of wastewater facilities, or any combination thereof. Eligible projects include new construction or upgrading/expansion of existing facilities, including wastewater treatment plants, pump stations, force mains, collector sewers, interceptors, elimination of combined sewer overflows, and nonpoint source pollution remedies.

SRF loan applicants must pledge security for loan repayment, agree to adjust user rates as needed to cover debt service and fund depreciation, and maintain financial records that follow governmental accounting standards. SRF loan interest rates range from zero percent to market rate, depending on the community's per-capita income, taxable sales, and taxable property values. Most SRF loan recipients qualify for interest rates between 2 and 4 percent. Interest rates are fixed for the life of the term of the loan. The maximum loan term is 20 years or the design life of the proposed wastewater facility, whichever is shorter.

The Division of Community Assistance maintains a Priority Ranking System and Priority List for funding the planning, design, and construction of wastewater facilities. The Priority Ranking List forms the basis for funding eligibility determinations and allocation of Clean Water SRF loans. Each project's priority rank is generated from specific priority ranking criteria and the proposed project is then placed on the Project Priority List. Only projects identified on the Project Priority List may be eligible for SRF loans. The process of being placed on the Project Priority List must be initiated by a written request from the potential SRF loan recipient or their engineering consultant. SRF loans are awarded to the highest priority projects that have met SRF technical, financial, and administrative requirements and are ready to proceed.

Since SRF loans include federal funds, each project requires development of a Facilities Plan, an environmental review, opportunities for minority and women business participation, a State-approved sewer use ordinance and Plan of Operation, and interim construction inspections.

For further information about Tennessee's Clean Water SRF Loan Program, contact the Division of Community Assistance by telephone at (615) 532-0445 or visit their Web site at <http://Tennessee.gov/environment/srf>.

5.3.C. Tennessee Department of Agriculture. The Tennessee Department of Agriculture's Water Resources Section consists of the federal Section 319 Nonpoint Source Program and the Agricultural Resources Conservation Fund Program. Both of these are grant programs which award funds to various agencies, non-profit organizations, and universities that undertake projects to improve the quality of Tennessee's waters and/or educate citizens about the many problems and solutions to water pollution. Both programs fund projects associated with what is commonly known as "nonpoint source pollution."

The Tennessee Department of Agriculture's Nonpoint Source Program (TDA-NPS) has the responsibility for management of the federal Nonpoint Source Program, funded by the US Environmental Protection Agency through the authority of Section 319 of the Clean Water Act. This program was created in 1987 as part of the reauthorization of the Clean Water Act, and it established funding for states, territories and Indian tribes to address NPS pollution. Nonpoint source funding is used for installing Best Management Practices (BMPs) to stop known sources of NPS pollution, training, education, demonstrations and water quality monitoring. The TDA-NPS Program is a non-regulatory program, promoting voluntary, incentive-based solutions to NPS problems. The TDA-NPS Program basically funds three types of programs:

- **BMP Implementation Projects.** These projects aid in the improvement of an impaired waterbody, or prevent a non-impaired water from becoming listed on the 303(d) List.
- **Monitoring Projects.** Up to 20% of the available grant funds are used to assist the water quality monitoring efforts in Tennessee streams, both in the state's 5-year watershed monitoring program, and also in performing before-and-after BMP installation, so that water quality improvements can be verified. Some monitoring in the Tennessee portion of the Little Hatchie River Watershed was funded under an agreement with the Tennessee Department of Agriculture, Nonpoint Source Program (U.S. Environmental Protection Agency Assistance Agreement C99944674-04-0).
- **Educational Projects.** The intent of educational projects funded through TDA-NPS is to raise the awareness of landowners and other citizens about practical actions that can be taken to eliminate nonpoint sources of pollution to the waters of Tennessee.

The Tennessee Department of Agriculture Agricultural Resources Conservation Fund Program (TDA-ARCF) provides cost-share assistance to landowners across Tennessee to install BMPs that eliminate agricultural nonpoint source pollution. This assistance is provided through Soil Conservation Districts, Resource Conservation and Development Districts, Watershed Districts, universities, and other groups. Additionally, a portion of the TDA-ARCF is used to implement information and education projects statewide, with the focus on landowners, producers, and managers of Tennessee farms and forests.

Participating contractors in the program are encouraged to develop a watershed emphasis for their individual areas of responsibility, focusing on waters listed on the Tennessee 303(d) List as being impaired by agriculture. Current guidelines for the TDA-ARCF are available. Landowners can receive up to 75% of the cost of the BMP as a reimbursement.

Since January of 1999, the Department of Agriculture and the Department of Environment and Conservation have had a Memorandum of Agreement whereby complaints received by TDEC concerning agriculture or silviculture projects would be forwarded to TDA for investigation and possible correction. Should TDA be unable to obtain correction, they would assist TDEC in the enforcement against the violator. More information forestry BMPs is available at:

<http://www.tennessee.gov/agriculture/forestry/bmpmanual.html> and the complaint form is available at: http://www.state.tn.us/environment/wpc/forms/wqlogging_cn1274.doc

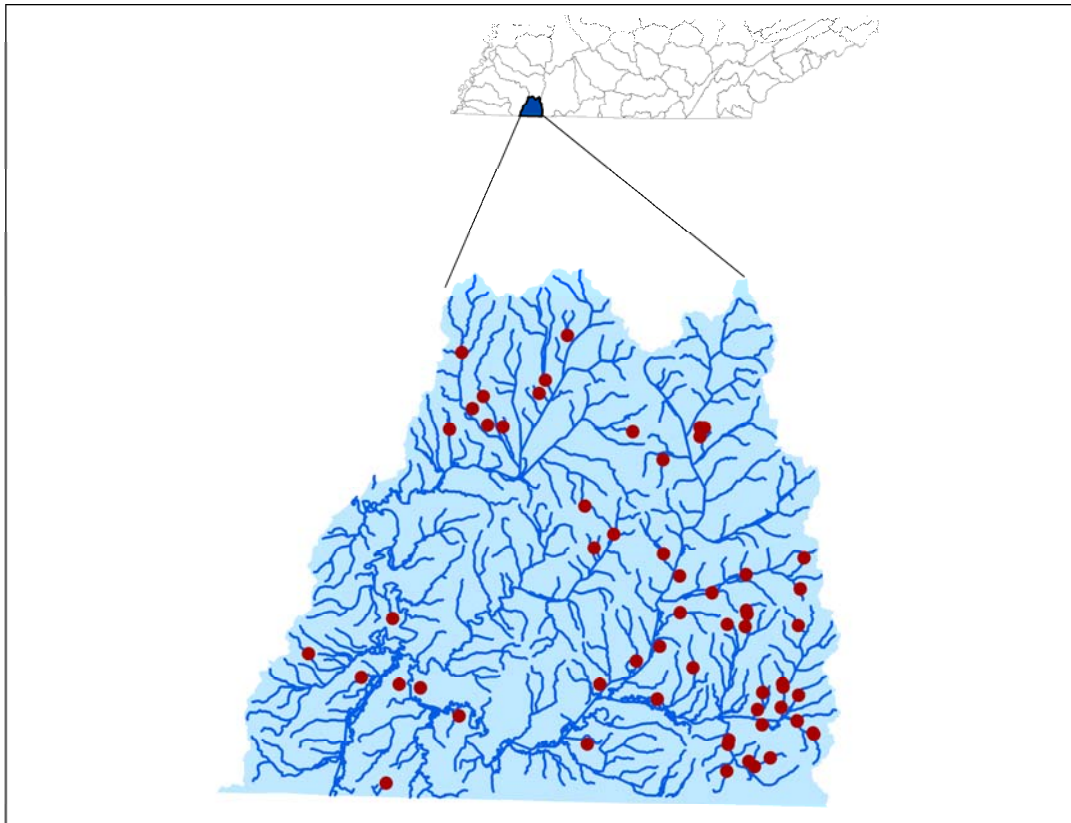


Figure 5-5. Location of BMPs installed from 1999 through 2005 in the Tennessee Portion of the Little Hatchie River Watershed with Financial Assistance from the Tennessee Department of Agriculture's Nonpoint Source and Agricultural Resources Conservation Fund Grant Programs. More information is provided in Appendix V.

5.3.D. West Tennessee River Basin Authority. The West Tennessee River Basin Authority, an agency of the Department of Environment and Conservation, is responsible for the preservation of the natural flow and function of rivers and streams in the Forked Deer, Obion and Hatchie River Basins. As a Water Quality Partner, the Basin Authority conducts a variety of activities directly related to the conservation of resources in these river basins. In carrying out its mission the Basin Authority:

- Pursues and implements meandering stream and river restoration projects, with the goal of restoring natural floodplain dynamics and the associated riverine ecosystems.
- Implements watershed-level projects designed to reduce the volume of sediment entering streams, and rivers. Excessive sedimentation can severely impair water quality as well as aquatic and floodplain habitats.
- Performs environmentally-sensitive removal of logjams and obstructions to flow in streams and rivers, resulting in the preservation of environmental and economic resources.
- Maintains 120 Flood Control and Sediment Retention Structures, designed to increase flood storage capacity and to improve water quality through removal of suspended sediments.
- In support of its work, the Basin Authority receives donations of Conservation Easements on Bottomland Hardwood Timber and other Wetlands. To date, over 23 square miles have been donated to the Basin Authority by private landowners.
- Maintains several large Bank Stabilization Projects, designed to prevent severe bank erosion. Where feasible, the Basin Authority utilizes bioengineering techniques to stabilize river banks, while, at the same time, reestablishing the riparian corridor.
- Maintains several Grade Control Structures designed to prevent further vertical degradation of altered streams and rivers. These structures, not only protect vital infrastructure, but help prevent the release of large volumes of sediment.

Through its efforts, the West Tennessee River Basin Authority will remain a strong advocate for the conservation and sustainable utilization of the resources within the Hatchie, Obion and Forked Deer River Basins.

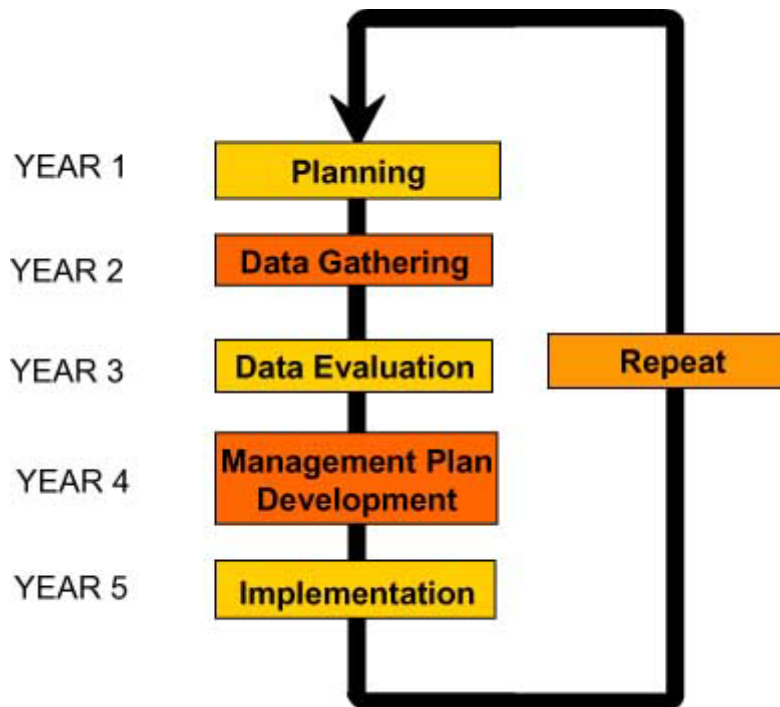
The West Tennessee River Basin Authority office is located at 3628 East End Drive in Humboldt, Tennessee. For additional information or assistance, call 731/784-8173.

5.3.E. Mississippi Department of Environmental Quality (MDEQ) - Basin Management Approach. The purpose of Mississippi's Basin Management Approach is to foster stewardship of Mississippi's water resources through collaborative watershed planning, education, protection and restoration initiatives. Over 50 state and federal agencies and stakeholder organizations are working together with local watershed teams to implement the Basin Management Approach.

How Does It Work?

There are ten major drainage basins in Mississippi. Teams of water resources experts from state and federal agencies and stakeholder organizations work together in each basin. A Basin Coordinator from MDEQ leads each team. The role of each team is to take its basin through a five-step process known as the Basin Management Cycle. The cycle involves planning, data gathering, data evaluation, management plan development and implementation of the plan. The cycle is repeated every five years.

Basin Management Cycle



The Hatchie River watershed in Mississippi's is in the North Independent Streams basin. Basin Management Approach planning activities are scheduled to begin in the North Independent Streams Basin in 2007.

What are the Benefits of Participating in Mississippi's Basin Management Approach?

- The approach identifies and targets our greatest water quality problems and focuses efforts and funding on solving them.
- The approach provides more opportunities for direct involvement by you and other Mississippians in developing and implementing solutions to our water quality problems.
- The approach creates a more direct pathway for you and other basin stakeholders to access available technical assistance and funding resources.
- The approach lessens the need for future environmental regulation.
- The approach increases the likelihood of good quality water resources for future generations.

How Can You Participate?

Successfully managing water resources requires the input of all citizens in a basin - from homeowners to farmers to businesses to local officials. Mississippi's Basin Management Approach provides opportunities for all to participate in decision-making efforts and in shaping the future of water quality. Remember, this is your basin. Take ownership of it and join the effort to protect its water resources.

There are several ways you can participate in the Basin Management Approach.

- Participate in local stakeholder meetings.
- Join a local watershed group or start one of your own.
- Contact your Basin Coordinator about water quality concerns and how you can get involved.

For more information on water quality or the basin management approach in the Little Hatchie River Watershed, visit Mississippi's Basin Management website or contact the Basin Management Section Chief.

http://www.deq.state.ms.us/MDEQ.nsf/page/WMB_Basin_Management_Approach

Richard B. Ingram
Chief, Basin Management Section
Watershed Management Branch
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, MS 39289-0385
601-961-5078 (office)
Richard_Ingram@deq.state.ms.us (e-mail)

5.4. LOCAL INITIATIVES.

5.4.A. Friends of West TN Refuges. The Friends of West TN Refuges is a non-profit organization designed to help the refuges of Tennessee through fundraising and volunteer work. Their mission is to promote and enhance the integrity of the West Tennessee National Wildlife Refuges through activities that advance public understanding, awareness, appreciation, and enjoyment of the natural environment. Their goals are to support refuge activities and events, increase awareness of West Tennessee Refuges, educate the public about The U.S. Fish & Wildlife Service's mission, and to increase fundraising to support refuge programs. They have achieved funding for our Backyard Habitat, Junior Ranger Program, water delivery systems, and 3 observation towers.

Contact : Dick Preston (901) 837-3360

5.4.B. The Nature Conservancy (TNC). The Tennessee State Wildlife Action Plan (SWAP), formerly known as the Comprehensive Wildlife Conservation Strategy (CWCS), was developed by the Tennessee Wildlife Resources Agency with assistance from The Nature Conservancy in 2005. Congress mandated that each state and territory in the United States develop a SWAP as a requirement for continued receipt of federal State Wildlife Grant funding. These plans require the completion of 8 key elements of wildlife planning: 1) a list of animal species of greatest conservation need, 2) information about the distribution and abundance of species targets, 3) locations and relative conditions of key habitats, 4) descriptions of problems affecting target species and their habitats, 5) descriptions of conservation actions and priorities for conserving target species and habitats, 6) details for monitoring target species, conservation actions, and adaptive management, 7) discussion of plans to review the SWAP at specific intervals, and 8) information about coordination and implementation of the SWAP with major stakeholders. In Tennessee, the SWAP was integrated into a spatial model using Geographic Information Systems (GIS) and other database technology. Priority aquatic, terrestrial, and subterranean areas for conservation were identified across the state. Priorities were determined in the GIS model based upon relative differences in species rarity, population viability, and potential mobility of species across habitat units. Priority problems affecting species and needed conservation actions are detailed across each region of the state.

For complete information about the Tennessee SWAP, please visit <http://www.state.tn.us/twra/wildlife/cwcs/cwcsindex.html> to read or download the full report.

Contact:

Chris Bullington

State Conservation Planning Manager

The Nature Conservancy, TN Chapter

2021 21st Avenue South; Suite C-400

Nashville, TN 37212

phone: (615) 383-9909 x 227

5.4.C. The Chickasaw-Shiloh Resource Conservation and Development (RC&D) Council. The Chickasaw Shiloh RC&D Council was authorized for operation on April 28, 1976. Since that time the Council has assisted the citizens of our area develop and implement a wide array of projects totaling over \$50,000,000. These works of improvement would not have been possible without the cooperation of the citizens of our area, local, state and federal agencies and organizations.

The Chickasaw-Shiloh RC&D area covers 4,768 square miles or 3,051,520 acres. The area includes Chester, Decatur, Fayette, Hardeman, Hardin, Haywood, Henderson, McNairy and Madison Counties, Tennessee. The western boundary of the area adjoins Shelby County, Tennessee, the largest and most heavily populated county in Tennessee.

Issues of water quality due to excessive erosion are common throughout the area. The Council has assisted numerous groups and agencies carry out watershed plans to improve the water quality of the area. The Council has received over \$1,000,000 through grants and then distributed to landowners to implement best management practices.